ABSTRACT OF THE DISCLOSURE

A linear electrodynamic system for conversion of mechanical motion into electrical power or conversion of electrical power into mechanical motion allows for advantageous mass and size reductions. Magnet volume is increased through use of non-annular shaped magnets affixed to stator poles. Mover sections complementary in shape to the non-annular magnets. The mover, stator and associated windings used have reduced mass and size resulting in overall mass and size reductions of the innovative linear electrodynamic system compared with conventional linear electrodynamic systems of similar performance capability.